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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,421	12/22/2000	Sofiene Affes	AP660761US	8016

7590 06/01/2004  
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CANADA

EXAMINER
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BOCURE, TESFALDET

ART UNIT	PAPER NUMBER
2631	126

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/742,421

Applicant(s)

AFFES ET AL.

Examiner

Tessfaldet Bocure

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-48 and 50-71 is/are allowed.
- 6) ☒ Claim(s) 49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4&5.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Canada on 12/22/00. It is noted, however, that applicant has not filed a certified copy of the Canadian application as required by 35 U.S.C. 119(b).

### ***Information Disclosure Statement***

2. The information disclosure statements filed June 11, 2001 and July 2, 2001 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Please note that the IDSs of June 11, 2001 and July 2, 2001 have been considered in part because the cited references, Item 1B of the IDS received on July 2, 2001 and items 1R-5B in the IDS received on June 1, 2001, are not readily available to the Examiner.

### ***Claim Rejections - 35 USC § 103***

3. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Own Admitted Prior Art (AOAPA) Art fig. 5 in view of Bensley et al. (IEEE, Maximum-Likelihood Synchronization of a Single User for Cod-Division Multiple Access Communication Systems).

Art Unit: 2631

(AOAPA) Art fig. 5 shows a spread spectrum receiver having the claimed means for processing (18), means for despreading (19), means for beamforming (27), means for driving (29), and means for channel identifying (28).

However (AOAPA) Art fig. 5 fails to show the means for reshaping as in claim 49.

Bensley for the same endeavor as the instant application and that of (AOAPA) teaches a spread spectrum receiver for mitigating noise due to of the multiple access interference using an observation vector (claimed reshaping means for generating an observation vector).

Therefore, it would have been obvious to one of an ordinary skill in the art to use the observation vector of Bensley in the (AOAPA) Art fig. 5 in order to mitigate noise or interferences from the received spread spectrum at the time the invention was made.

#### ***Allowable Subject Matter***

4. Claims 1-48 and 50-71 are allowed.

#### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US patent numbers 5,845,208, 5,867,411 and 6,240,098 issued to Hottinen et al., Kumar and Thibault et al. respectively disclose a spread spectrum communication system having means for generating an observation vector from the received observation matrix.

Art Unit: 2631

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tesfaldet Bocure whose telephone number is (703) 305-4735. The examiner can normally be reached on Mon-Thur (7:30a-5:00p) & Mon.-Fri (7:30a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad H Ghayour can be reached on (703) 306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T.Bocure

Tesfaldet Bocure  
Primary Examiner  
Art Unit 2631

